CH2M HILL Hanford Group, Inc.		Manual	ESHQ
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ATTACHMENT A - MEDICAL AND TRAINING REQUIREMENTS FOR VEHICLE AND HEAVY

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1.0 PURPOSE AND SCOPE

This standard establishes the requirements and responsibilities for a transportation safety program to ensure the safe operation of government motor vehicles, private vehicles, or bicycles on the Hanford Site, or on official business off site. It also ensures compliance with DOE and OSHA requirements and complies with the motor vehicle laws of the State of Washington. The requirements in this standard apply to all CH2M HILL Hanford Group, Inc. (CH2M HILL) employees and its subcontractors.

This standard applies to the operation of all government vehicles, including bicycles, mechanized equipment (bulldozers, scrapers, etc.), private vehicles on official business, traffic control through construction activities, and the operation of railroad systems and vehicles. This standard is based primarily on the requirements from 10 CFR 851, Appendix A9; 29 CFR 1926, Subpart O and Subpart W; and 49 CFR 211-240.

Due to unique controls and dome loading consideration, <u>TFC-OPS-OPER-C-10</u> applies to vehicle usage within tank farms.

2.0 IMPLEMENTATION

This standard is effective on the date shown in the header.

3.0 STANDARD

(5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6)

The requirements of this standard are mandatory. Guidance, which may be given after a requirement, is not mandatory.

3.1 General Requirements for all Vehicles

- 1. Comply with Washington State motor vehicle laws and follow established and accepted safe practices.
- 2. Have valid state drivers' licenses in their possession. (5.1.6)

Exception: Employees wearing anti-contamination clothing and Hanford Fire Department personnel on emergency response are not required to carry their drivers' licenses.

- 3. Give pedestrians the right-of-way.
- 4. Vehicle operators will limit their use of cell phones to the extent necessary for the safe operation of the motor vehicle (i.e., use hands-free devices; safely pull off the roadway before answering the call, or, when necessary, to identify the caller; limit the duration of the call by obtaining a call-back number and contacting the caller when it is safe to do so).
- 5. Wear seat belts provided on all equipment.
- 6. Operate the vehicle in accordance with existing weather conditions.

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7. Do not leave any vehicle unattended until the engine is shut off, the parking brake securely set, and the gear selector placed in the "park" position (on automatic transmissions) or the lowest gear position (on manual transmissions). Secure government vehicles in accordance with TFC-BSM-FPM_PR-C-06. (5.1.6)

NOTE: It is acceptable during the warm-up of the vehicle (running) to perform the necessary pre-use inspections/actions. This includes scraping windows, allowing the vehicle to cool inside during hot weather, checking headlights, tail lights, tires, etc. The person driving or in charge of the vehicle shall not leave the immediate area but stay with the vehicle. If the person leaves the area, the vehicle shall be secured.

8. Training, licensing, and medical requirements are noted for the type of vehicle or heavy equipment in Attachment A.

3.1.2 Inspecting Vehicles

Vehicle operators:

- 1. Conduct a 360 pre-use walk-around inspection each time a motor vehicle is be operated to check for the following:
 - Location of people, bicycles, vehicles nearby
 - Top and side clearances (how close is the fence, electrical lines)
 - Obstructions (posts, fire hydrants, holes)
 - Body and glass damage
 - Tire inflation.
- 2. Inspect and test the essential controls and safety equipment before use and report any unsatisfactory conditions or deficiencies to the equipment administrator.
- 3. Do not drive a government vehicle if you believe the vehicle is unsafe to drive.

Equipment administrator: Ensure that all government motor vehicles are maintained, serviced, and inspected, as required.

3.1.3 Operating Government Vehicles

Managers/supervisors: Ensure that commercial motor vehicle (CMV) drivers receive the required physical exams (pre-employment and Department of Transportation (DOT) every two years) and training requirements as noted for the type of vehicle or heavy equipment in Attachment A.

Vehicle operators:

- 1. Notify their immediate supervisor upon suspension or revocation of their state drivers' licenses.
- 2. If driving special purpose government vehicles or shipping and handling hazardous material, obtain proper training and certification.

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NOTE: A state commercial driver's license with proper endorsements for the class of vehicle driven is acceptable proof of training. Additional training requirements are noted in Attachment A.

- 3. While operating a vehicle, do not wear any device which restricts or impairs hearing or vision (radio headphones or eyeglass side shields made of opaque material).
- 4. Do not load any government vehicle so that your view is obstructed or the operating safety of the vehicle is compromised. Do not operate vehicles with materials on the dashboard.
- 5. Ensure that all vehicle loads are secure and that vehicles are not loaded beyond their rated capacity.
 - a. Inspect load securing material (straps, chains, and binders) before use on each load to ensure that they are in a safe condition and are rated for the size of the load.
 - b. Tag out of service and properly dispose of damaged or defective load securing materials.
- 6. Ensure that all earthmoving and compacting equipment with an obstructed view to the rear are equipped with a reverse signal alarm distinguishable from the surrounding noise level, or that a signal person directs the reverse motion.
- 7. Use a signal person whenever such equipment is used in tight quarters or in areas that are congested with personnel, material, or equipment, and in areas that are within 10 feet of overhead electrical and communication lines, regardless of whether an alarm is provided.
- 8. Do not permit any person to ride on equipment that is not specifically designed for carrying passengers. Do not carry people in the back of a pickup truck.
 - NOTE: If there is a declared emergency, then you may transport others for a short distance (usually in a single plant area) in pickup truck beds. If this happens, then all passengers are to be kept seated on the truck bed floor at all times; secure the tailgate in the "up" position; drive 20 mph or slower; and make sure passengers are protected from tools and cargo.
- 9. Remove ice, snow, mud, and dirt from all windows, headlights, and tail lights of motor vehicles before driving.
- 10. Non-highway vehicles (electric or gas powered Cushman-type motor carts) are to be driven only in and around tank farms and CH2M HILL facilities and not be driven on any named or numbered roads.
- 11. Do not move the vehicle unless all passengers are wearing their seat belts.

3.1.4 Accidents

See <u>TFC-BSM-FPM_PR-C-06</u> for the vehicle accident reporting process. If there is an injury, see <u>TFC-ESHQ-S_CMLI-C-02</u>.

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3.1.5 Vehicle Safety Awareness

(5.1.1)

Safety and Health will sponsor through safety initiatives and safety councils a vehicle safety awareness and incentive program to encourage safe driving practices.

3.2 Requirements Specific to Activity

3.2.1 Operating Off-Road Light Vehicles

Operators:

1. Do not drive vehicles off-road anywhere on the Hanford Site unless required by job assignment.

Guidance: Off-road means off hard-paved, hard-surfaced, or unimproved roads.

- 2. Ensure that any vehicle used for off-road driving has radio transmitter/receiver (or cellular telephone), fire extinguisher, and shovel.
- 3. Minimize any adverse impacts to the environment.
- 4. Do not park vehicles equipped with catalytic converters over dry grass, brush, etc.

Guidance: Check periodically for lodged grass or brush underneath the vehicle and near the exhaust system and remove it.

5. Immediately notify the Hanford Fire Department if a grass fire occurs (even when the fire has been extinguished) so that they can check for possible rekindling.

3.2.2 Controlling Traffic Through Construction Activities

During construction or maintenance that will detour, restrict, or otherwise affect access to facilities or traffic on Hanford Site roads, the project or Operations manager observes the following requirements.

- 1. At least two weeks before the start of an operation:
 - a. Notify affected site personnel
 - b. Prepare a written plan for approval by the site traffic engineer
 - c. Ensure flagging personnel are trained
 - d. Specify and ensure proper and effective location of temporary traffic control signs, devices, signals, and barricades in accordance with:
 - 29 CFR 1926, Subpart G, Signs, Signals, and Barricades (OSHA)
 - Manual on Uniform Traffic Control Devices for Streets and Highways,
 U.S. Department of Transportation, Federal Highway Administration.
- 2. Remove or cover any existing control devices that drivers should not obey while construction or maintenance activities are being performed.

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- 3. When the construction or maintenance is complete, and before a roadway or area is restored to unrestricted use:
 - a. Uncover or restore all regular traffic control signs and devices
 - b. Cover or remove all temporary traffic control signs and devices.
- 4. When construction activities are adjacent to the roadway, ensure that warning signs are erected facing in both directions.
- 5. Ensure that all signs intended for hazard warning during hours of darkness are reflectorized or illuminated.
- 6. Ensure flagging personnel are trained (possess a valid certification) and equipped to direct or redirect traffic before they are assigned as a flagger.

Flaggers: Wear an orange warning garment (vest) and a yellow (or other equally visible color) protective helmet.

3.2.3 Operating Oversized/Overweight Loads

- 1. Managers/supervisors Obtain "Oversized/Overweight" load permits as prescribed by Hanford Site Operations. (See Attachment B for requirements dependent on load configuration).
- 2. Pilot operator certification Operators of pilot/escort vehicles must be certified as having received department-approved base level training as a pilot/escort vehicle operator. A pilot/escort vehicle operator with a Washington state driver's license must have a valid Washington state pilot/escort vehicle operator certificate/card which must be on the operator's person while performing escort vehicle operator duties.
- 3. Responsibilities of the operator of a pilot/escort vehicle when in front The operator shall:
 - a. Provide general warning to oncoming traffic of the presence of the permitted vehicle by use of signs and lights.
 - b. Not be any farther ahead of the extra-legal vehicle than is reasonably prudent, considering speed of the extra-legal vehicle, other traffic, and highway conditions. Do not exceed one-half mile distance between pilot/escort vehicle and extra-legal vehicle in order to maintain radio communication, except when necessary to safely travel a long narrow section of highway.
 - c. Assist in guidance to a safe place, and/or traffic control, in instances when the extra-legal vehicle becomes disabled.
- 4. Responsibilities of the operator of a pilot/escort vehicle when in rear: The operator shall:
 - a. Provide general warning to traffic approaching from the rear of the extra-legal vehicle ahead by use of signs and lights
 - b. Do not follow more closely than is reasonably prudent, considering the speed of the extra-legal vehicle, other traffic, and highway conditions. Do not exceed

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one-half mile distance between the pilot/escort vehicle and the extra-legal vehicle in order to maintain radio communication, except when necessary to safely travel a long narrow section of highway

- c. Assist in guidance to a safe place, and/or traffic control, in instances when the extra-legal vehicle becomes disabled.
- 5. Additional equipment is required on the vehicle when operating as a pilot/escort:
 - A minimum of two flashing or rotating amber (yellow) lights, positioned above the roof line, visible from a minimum of five hundred feet to approaching traffic from the front or rear of the vehicle are required. Light bars, with appropriately colored lights, meeting the visibility minimums are acceptable. Lights must only be activated while escorting an extra-legal vehicle, or when used as traffic warning devices while stopped at the side of the road taking height measurements during the pre-running of a planned route. The vehicle's headlights must also be activated while escorting an extra-legal vehicle.
 - A sign reading "OVERSIZE LOAD," measuring at least five feet wide, ten inches high with black lettering at least eight inches high in a one-inch brush stroke on yellow background is required. The sign shall be mounted over the roof of the vehicle and shall be displayed only while performing as the pilot/escort of an extra-legal load. When the vehicle is not performing as a pilot/escort, the sign must be removed, retracted, or otherwise covered.
 - A two-way radio communications system capable of providing reliable two-way voice communications, at all times, is required between the operators of the pilot/escort vehicle(s) and the extra-legal vehicle(s).

3.2.4 Maintaining Equipment

Managers/supervisors:

- 1. Substantially block or crib heavy machinery, equipment, or their parts, which are suspended or held aloft by the use of slings, hoists, or jacks to prevent falling or shifting, before allowing employees to work under or between them.
- 2. Either fully lower or block bulldozer and scraper blades, end-loader buckets, dump bodies, and similar equipment when they are being repaired or when not in use.
- 3. Ensure that all controls are placed in a neutral position with the motor stopped and brakes set unless the work being performed requires otherwise.

3.3 Requirements Specific to Type of Vehicle

3.3.1 Operating Mechanized Equipment

Qualified operators:

1. Operate and maintain mechanized equipment in accordance with the 29 CFR 1926, Subpart O, "Motor Vehicles, Mechanized Equipment, and Marine Operations" (OSHA).

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- 2. Operate only the mechanized equipment you are qualified for as authorized by supervision.
- 3. Inspect all mechanized equipment daily prior to use. Correct any unsafe condition noted during this inspection before using the equipment.
- 4. Handle loads being lifted or transported by mechanized equipment in a manner that ensures stability and prevents loss of the load during transit.
- 5. Ensure that equipment left unattended at night adjacent to traveled roadways has appropriate lights or reflectors, or place barricades equipped with appropriate lights or reflectors, to identify the location of that equipment.
- 6. When operating or transporting equipment that may come into close contact with overhead electrical or communication lines, use a signal person to assist the equipment operator in maintaining a safe clearance and to provide warnings when it appears that the equipment may come into close contact with or strike the lines. In addition, when operations are conducted at a distance of 10 feet or less, notify the Fluor Hanford Electrical Utilities department, 373-7753, and request that the lines be deenergized and verified safe by a representative from the Electrical Utilities department.
- 7. Where traffic is diverted onto dusty surfaces, suppress the dust with water or other approved means.
- 8. Do not mount or dismount equipment while it is in motion.
- 9. Do not allow riders on equipment or any part of the load unless the equipment is designed for more than one person or a seat with a seat belt is provided and used.
- 10. Whenever equipment is parked, set the parking brake. When equipment is parked on inclines, chock the wheels and set the parking brake.
- 11. Do not operate tracked units, bulldozers, on paved roads except for approved crossings.

Managers/supervisors:

- 1. Ensure that all cab glass is safety glass or equivalent that introduces no visible distortion affecting the safe operation of any machine. Plexiglas is not an acceptable substitute for safety glass.
- 2. Ensure that mechanized equipment is provided with roll over protective structures.
 - Exception: Roll-over protective structures are not required for off-highway trucks, compactors, or skid-steer equipment.
- 3. Ensure that seatbelts are provided and worn on all equipment, except for equipment designed only for standup operation.
- 4. Ensure that all equipment has a braking system capable of stopping and holding the equipment fully loaded.

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- 5. Stop, secure, and substantially block or crib the equipment being repaired to prevent falling or shifting before allowing employees to work under or between equipment.
- 6. Ensure that equipment operated in flammable atmospheres or enclosed spaces is designed for use in that type of environment.
- 7. Ensure that pneumatic-tired earthmoving haulage equipment, with a maximum speed exceeding 15 miles per hour, is equipped with fenders on all wheels.

3.4 Railroad Safety

Managers/supervisors:

- 1. Ensure that designs for railroad facilities comply with criteria established by the "American Railway Engineering Association Manual for Railway Engineering."
- 2. The on-site railroad system is managed by Fluor Hanford and maintained by the Tri-City Railroad. These entities will prepare operating manuals or procedures for training, qualification, use, maintenance, and operation of equipment by personnel assigned to railroad operations and track maintenance. The requirements contained in 49 CFR 211-240 are the basis for these manuals/procedures.
- 3. Obtain written approval from track maintenance and rail operations management prior to commencing any work activity within the railroad right-of-way designated as 25 ft. horizontal clearance measured outward from the railroad track center line, and 27 ft. vertical height clearance measured from the top of the rail.

3.5 Bicycle Safety

See <u>TFC-POL-31</u> for requirements for bicycle riding on contractor approved routes.

4.0 **DEFINITIONS**

No terms or phrases unique to this standard are used.

5.0 SOURCES

5.1 Requirements

- 1. 10 CFR 851, Appendix A, Section 9 "Motor Vehicle Safety."
- 2. 29 CFR 1910, Subpart Z, "Toxic and Hazardous Substances." (S/RID) 1910.1201, "Retention of DOT markings, placards and labels."
- 3. 29 CFR 1926, "Subpart O, Motor Vehicles, Mechanized Equipment, and Marine Operations." (S/RID)
- 4. 29 CFR 1926, "Subpart W, Rollover Protective Structures; Overhead Protection." (S/RID)
- 5. 49 CFR, "Transportation," Chapter II, Federal Railroad Administration, Department of Transportation, Parts 211-240.

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6. RCW 46.20.001, "License Required - Rights and Restriction."

5.2 References

- 1. TFC-BSM-FPM_PR-C-06, "General Services Administration and RL-Owned Vehicle and Equipment Management."
- 2. TFC-ESHQ-S_CMLI-C-02, "Injury and Illness Events."
- 3. TFC-POL-31, "Recreational Policy."

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ATTACHMENT A – MEDICAL AND TRAINING REQUIREMENTS FOR VEHICLE AND HEAVY EQUIPMENT OPERATORS

Vehicle	GENERAL REQUIREMENTS	
	Operators of Private Vehicles must possess:	
PRIVATE VEHICLES	A valid State Drivers License.	
GOVERNMENT VEHICLE OPERATOR	All Government Vehicle Operators must possess: • A valid State Drivers License.	
HAZ MAT VEHICLE OPERATOR	 Hazardous Material Vehicle Operator Must complete the following: Annual physical examination Substance Abuse testing in accordance with 49 CFR Part 40 and Parts 325-399 Completion of Commercial Driver's License with HazMat Endorsement Must have Fingerprints on file Have maintained a driver qualification file with annual certification. 	
CRANE OPERATOR QUALIFICATIONS	 Crane operators must complete the following: Physical examination (initial and every 36 months thereafter) Substance abuse test (initial and every 36 months thereafter) Completion of H&R training for the type and class of equipment to be operated in accordance with DOE RL 92-36. Acceptable Hoisting and Rigging training includes either: Possession of Certified Crane Operator's card current within previous 36 months, OR Completion of Hanford site H&R training, AND Acceptance of previous crane operator training is conditional upon operators passing an oral or written examination and an on site equipment specific OJE for the class of crane being operated within the previous 36 months. 	
FORKLIFT OPERATOR QUALIFICATIONS	 Forklift operators must complete the following: Physical examination (initial and every 36 months thereafter) Substance abuse test (initial and every 36 months thereafter) Submission of previous forklift operator training in accordance with DOERL 92-36 requires documented evidence of the type and class of equipment and hours of experience, and Proof of Vendor or equipment manufacturer training compliant with 29 CRF 1910.178 Acceptance of previous forklift operator training is conditional upon operators passing an oral or written examination and an on site equipment specific OJE for the class of forklift being operated within the previous 36 months. 	

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ATTACHMENT A - MEDICAL AND TRAINING REQUIREMENTS FOR VEHICLE AND HEAVY EQUIPMENT OPERATORS (Cont.)

Vehicle	GENERAL REQUIREMENTS			
	Heavy equipment operators must complete:			
	Physical examination (initial and every 36 months thereafter)			
	• Substance abuse test (initial and every 36 months thereafter).			
HEAVY				
EQUIPMENT	Heavy equipment operators are qualified by documenting one of the following:			
OPERATORS	Journeyman status in an applicable trade			
	Vendor or equipment manufacturer training			
	Degree or accreditation from applicable college or trade school program.			
	Employees operating elevating work platforms shall be trained and qualified to the requirements of <u>TFC-ESHQ-S-STD-12</u> .			
AERIAL LIFT OPERATORS	Aerial Lift operators must complete:			
	Physical examination (initial and every 36 months thereafter).			
	Aerial lift operators must complete or document the following:			
	Vendor or equipment manufacturer training, and			
	• Satisfactorily completing an on site equipment specific OJE for the class of aerial lift being operated, or			
	Provide documentation to confirm prior completion of equipment specific			
	OJE within the last 36 months.			
	Pilot car operators:			
PILOT CAR OPERATORS	• Pilot care operators shall be trained and qualified to the requirements of this standard (TFC-ESHQ-S-STD-02).			
	Pilot Operator certification – As prescribed in Washington Administrative			
	Code (WAC) 468-38-100, operators of pilot/escort vehicles must be			
	certified as having received WDOT approved base level training as a			
	pilot/escort vehicle operator. A pilot/escort vehicle operator with a			
	Washington state driver's license must have a valid Washington state			
	pilot/escort vehicle operator certificate/card which must be on the operator's person while performing escort vehicle operator duties.			
	person while performing escort vehicle operator duties.			

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ATTACHMENT B – PILOT CAR REQUIREMENTS FOR VARIOUS LOAD CONFIGURATIONS AND HIGHWAYES

The table below specifies the pilot car requirements for various load configurations and number of highway lanes.

Length of load/overhang	Height of load	Width of load	Number of highway lanes	Number of pilot cars required
				0
	Greater than 14'6"		All state highways	One at front with height measuring device
		Greater than 11'	Two lane	one at front and one at rear
		Greater than 14'	Mulit-lane	One at rear
		Greater than 20'	Multi-lane	Two ¹ , one in front and one at rear
Greater than 105' or when REAR overhang from center of rear axle exceeds 1/3 of trailer length			Two lane	One at rear
Front overhang Greater than 20' from center of front steering axle			Two lane	One at front
Rear overhang Greater than 20' from center of rear axle			Two lane	One at rear
Greater than 125'			Multi-lane	One at rear